Rec'd PCT/PTO 31 JAN 2006

PTO/SB/01A (09-04)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

			T (37 CFR 1.76)	
Title of Invention	ATOMIC LAYER DEP	OSITION USING	METAL AMIDINA	ATES
As the below name	d inventor(s), I/we déclare	that:		
This declaration is o	directed to:			
	The attached application	ı, or		
x	Application No.			05/12/2005
	X as amended	on	05/12/2005	(if applicable);
sought;				aimed and for which a patent is the claims, as amended by any
amendment specifical	ly referred to above;	THE GOVE IGENIES	z approunding	
material to patentabili	ity as defined in 37 CFR 1.56 tween the filing date of the	i, includina for conti	nuation-in-part applicat	formation known to me/us to be ions, material information which international filing date of the
believed to be true, as	nd further that these statemer e or imprisonment, or both, u	nts were made with	the knowledge that will	n on information and belief are ful false statements and the like the validity of the application or
FULL NAME OF IN	VENTOR(S)			•
Inventor one:	loy G. GORDON			
Signature:	Stol-	(citizen of:	US
Signature. 9 4	fre occor			
- //	Booyong S. LIM			
- //	ooyong S. LIM		Citizen of:	KOREA
Inventor two:	ooyong S. LIM			
Inventor two: Signature:	looyong S. LIM			
Inventor two: Signature: Inventor three:	Booyong S. LIM		Citizen of:	
Inventor two: Signature: Inventor three: Signature: Inventor four:	-		Citizen of:	
Inventor two: Signature: Inventor three: Signature: Inventor four: Signature:			Citizen of:	KOREA
Inventor two: Signature: Inventor three: Signature: Inventor four: Signature:			Citizen of:	KOREA
Inventor two: Signature: Inventor three: Signature: Inventor four: Signature: Additional inventor four:	ntors or a legal representative	are being named or	Citizen of: Citizen of: Citizen of: addition	al form(s) attached hereto.

PTO/SB/01A (09-04)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) ATOMIC LAYER DEPOSITION USING METAL AMIDINATES Title of Invention As the below named inventor(s), I/we declare that: This declaration is directed to: The attached application, or 05/12/2005 ____ , filed on 10/534687 Application No. 05/12/2005 (if applicable); X as amended on I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought: I/we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above; I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application. All statements made herein of my/our own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon. FULL NAME OF INVENTOR(S) Roy G. GORDON Inventor one: Citizen of: Signature: Booyong S. LIM Inventor two: **KOREA** Citizen of: Signature: Inventor three: Citizen of: Signature: Inventor four: Citizen of: additional form(s) attached hereto. Additional inventors or a legal representative are being named on I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: MS Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below. _ (Janice Roussel) Dated:

PTO/SB/96 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(b)
Applicant/Patent Owner: Roy G. GORDON et al.
Application No./Patent No.:10/534687 Filed/Issue Date:May 12, 2005
Entitled: ATOMIC LAYER DEPOSITION USING METAL AMIDINATES
Harvard University , a (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)
states that it is:
the assignee of the entire right, title, and interest; or
2. an assignee of less than the entire right, title and interest. The extent (by percentage) of its ownership interest is % in the patent application/patent identified above by virtue of either:
A. An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel
Frame, of for which a copy the correct action be data as a copy the correct of the current assignee as shown below:
1. From: To: The document was recorded in the United States Patent and Trademark Office at Reel , Frame , or for which a copy thereof is attached.
To: To: The document was recorded in the United States Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
3. From: To: To: The document was recorded in the United States Patent and Trademark Office at Reel , Frame , or for which a copy thereof is attached.
Additional documents in the chain of title are listed on a supplemental sheet.
Copies of assignments or other documents in the chain of title are attached. [NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]
The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.
Issac T. Kohiberg, Senior Associate Provost Chief Technology Development Officer Telephone Number
Office of Technology Development Hervard University Title
I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in I hereby certification with the U.S. Postal Service with sufficient postage as First Class Mail, in I hereby certification with the U.S. Postal Service with sufficient postage as First Class Mail, in I hereby certification with the U.S. Postal Service with sufficient postage as First Class Mail with the U.S. Postal Service with sufficient postage as First Class Mail with the U.S. Postal Service with sufficient postage as First Class Mail with the U.S. Postal Service with sufficient postage as First Class Mail with the U.S. Postal Service with sufficient postage as First Class Mail with the U.S. Postal Service with sufficient postage as First Class Mail with the U.S. Postal Service with the U.S. Postal
I hereby certify that this correspondence is being deposited with the U.S. Postal Service with suitable postage and envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below. Dated:

PTO/SB/80 (04-05;
Approved for use through 11/30/2005. OMB 0651-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

	OF ATTORNEY 1	O PROCEOUT		Live Abouttach	ed statement under
nereby revoke	e all previous powers o	f attorney given in th	e application identifie	d in the attach	
7 CFR 3.73(b))				
hereby appoir					
x Practition	ers associated with the	(23483)			
OR	er(s) named below (if more	l and the second properties	ioners are to be named,	then a customer r	number must be used):
Practitione	er(s) named below (if more	than ten paterit practiti	Official are to the second		Registration
	Name	Registration Number	Na Na	me	Number
1					
					Tax is appropriate with
	gent(s) to represent the und	lersigned before the Unite	ed States Patent and Trade	emark Office (USP ment records or as	signment documents
attomey(s) or a any and all patent	gent(s) to represent the und applications assigned only t	to the undersigned according 3.73(b).	Jing to the USP10 assign	Hom receive	
tached to this fo	m in accordance with 37 CF the correspondence add	tress for the application	n identified in the attach	ed statement und	ler 37 CFR 3.73(b) to:
Please change	the correspondence add	ustomer Number:			×
The a	ddress associated with C	ustomet ivambon			
OR					
Firm or					
Individua	Name				
Address					
		State		Zip	
Country		Telephone		Email	
	me and Address:				
Harvard U	Iniversity				
17 Quincy	/ Street				
	e, MA 02138				
Cambridg					
Cambridg					
					lant) is required to be
	form together with a s	statement under 37 C	FR 3.73(b) (Form PTO/	SB/96 or equiva	lent) is required to be completed by one of
A copy of this	s form, together with a sapplication in which this		ractitioner is authorize	SB/96 or equive R 3.73(b) may be ed to act on beh	lent) is required to be completed by one of alf of the assignee,
A copy of this	application in winer con-	orm if the appointed p	ractitioner is authorize Attorney is to be filed.	SB/96 or equiva R 3.73(b) may bed to act on beh	lent) is required to be e completed by one of alf of the assignee,
A copy of this	application in which the ners appointed in this fo entify the application in the second control of the secon	orm if the appointed p which this Power of A	ractitioner is authorized.	ed to act on ben	
A copy of this	application in which the ners appointed in this fo entify the application in the second control in the secon	orm if the appointed p which this Power of A	ractitioner is authorized the control of Assignee of Record plied below is authorized to	o act on behalf of	the assignee
A copy of this filed in each the practition and must ide	rers appointed in this formatify the application in the individual whose	orm if the appointed p which this Power of A	ractitioner is authorized the control of Assignee of Record plied below is authorized to	o act on behalf of	the assignee
A copy of this filed in each the practition and must ide	The individual whose	orm if the appointed p which this Power of A SIGNATURE of signature and tyle is supp	Attorney is to be filed. Of Assignee of Record plied below is authorized t	ed to act on ben	the assignee
A copy of this filed in each the practition and must ide Signature	The Individual whose	signature and pue is supplement. Senior Association Development	Attorney is to be filed. Of Assignee of Record plied below is authorized to Date Date Telepholiticar	o act on behalf of	the assignee
A copy of this filed in each the practition and must ide	The Individual whose	signature and pue is supplement. Senior Association Development	Attorney is to be filed. Of Assignee of Record plied below is authorized to Date Date Telepholiticar	o act on behalf of	the assignee
A copy of this filed in each the practition and must ide Signature	The Individual whose	signature and the is supplied by Development in Nology Development	Attorney is to be filed. Of Assignee of Record plied below is authorized to Date Date Telepholiticar	o act on behalf of	the assignee
A copy of this filed in each the practition and must ide Signature	The individual whose Jack	signature and the is supplied by Development in Nology Development	Attorney is to be filed. Of Assignee of Record plied below is authorized to Date Date Telepholiticar	o act on behalf of	the assignee
A copy of this filed in each the practition and must ide Signature	The individual whose Jack	signature and the is supplied by Development in Nology Development	Attorney is to be filed. Of Assignee of Record plied below is authorized to Date Date Telepholiticar	o act on behalf of	the assignee
A copy of this filed in each the practition and must ide Signature Name Title	The individual whose Jack	signature and the is supplied by Signature and Sign	practitioner is authorized that the provided below is authorized to be filed. Date Date Telepholitical	o act on behalf of the original	the assignee A5 - 3067
A copy of this filed in each the practition and must ide Signature Name Title	The Individual whose Isaac T. Kohi Chief Techno Office of Tech	signature and pue is supplement. Senior Association Development in mology Development in	Attorney is to be filed. Of Assignee of Record plied below is authorized to Date Date Telepholiticar	o act on behalf of the second	the assignee QS - 3067
A copy of this filed in each the practition and must ide Signature Name Title	The Individual whose Isaac T. Kohi Chief Techno Office of Tech	signature and pue is supplement. Senior Association Development in mology Development in	Attorney is to be filed. Of Assignee of Record plied below is authorized to Date Date Telepholiticar	o act on behalf of the property of the propert	the assignee QS ~ 3067 stage as First Class Mail, in the date shown below.
A copy of this filed in each the practition and must ide Signature Name Title	The individual whose Jack	signature and tyle is supply the	Attorney is to be filed. Of Assignee of Record plied below is authorized to Date Date Telepholiticar	o act on behalf of the second	the assignee QS ~ 3067 stage as First Class Mail, in the date shown below.

ASSIGNMENT

WHEREAS, I, Roy G. Gordon, being a citizen of the United States of America, residing at 22 Highland Street, Cambridge, Massachusetts 02138 am a co-inventor of certain new and useful inventions and discoveries, for which an application for Letters Patent entitled "Atomic Layer Deposition Using Metal Amidinates," was filed with the United States Patent and Trademark Office on May 12, 2005, and assigned United States Patent Application Number 10/534,687; and

WHEREAS, President and Fellows of Harvard College, a Massachusetts non-profit organization, whose business address is 17 Quincy Street, Cambridge, Massachusetts 02138, and which, together with its successors and assigns is hereinafter called "ASSIGNEE," is desirous of acquiring the title, rights, benefits, and privileges hereinafter recited;

NOW, THEREFORE, for and in consideration of good and valuable consideration furnished by ASSIGNEE to me, receipt and sufficiency of which I hereby acknowledge, I hereby, without reservations:

- 1. Assign, transfer, and convey to ASSIGNEE my entire right, title, and interest in and to said inventions and discoveries, said application for Letters Patent, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, continuation-in-part, continued prosecution applications, and convention applications based in whole, or in part, upon said inventions or discoveries, or upon said applications, and any and all Letters Patents, reissues, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon, or arise from, said inventions, said discoveries, said applications, and said Letters Patent;
- 2. Authorize ASSIGNEE to file patent applications in any or all countries on any or all of said inventions and discoveries in my name or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable, under International Conventions or otherwise;
- 3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments throughout the world to issue or transfer all said Letters Patents to ASSIGNEE, as assignee of the entire right, title, and interest therein or otherwise as ASSIGNEE may direct;
- 4. Warrant that I have not knowingly conveyed to others any right in said inventions, discoveries, applications, or patents, or any license to use the same, or to make, use, or sell

U.S.S.N. 10/534,687 Gordon, et al.

anything embodying or utilizing any of said inventions or discoveries; and that I have good right to assign the same to ASSIGNEE without encumbrance;

ASSIGNEE's request and at ASSIGNEE's expense, but without additional consideration to me or them, all acts reasonably serving to assure that said inventions and discoveries, said patent applications, and said Letters Patents shall be held and enjoyed by ASSIGNEE as fully and entirely as the same could have been held and enjoyed by me, my heirs, legal representatives, and assigns if this Assignment had not been made; and particularly to execute and deliver to ASSIGNEE all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by ASSIGNEE; and to communicate to ASSIGNEE all facts known to me relating to said inventions and discoveries or the history thereof, and to testify as to the same in any court or proceeding; and to furnish ASSIGNEE any and all documents, photographs, models, samples, and other physical exhibits in my control or in the control of my heirs, legal representatives, or assigns which may be useful for establishing the facts of my conceptions, disclosures, and reduction to practice of said inventions and discoveries.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 28 day of January 2006. Roy G. Gordon
COMMONWEALTH OF MASSACHUSETTS , ss:
On this 28 day of January, 2006, before me, the undersigned Notary public, personally appeared Roy 5. Tordow, proved to me through satisfactory evidence of identification to be the person Deble in the preceding or attached document in my presence. NOTARY PUBLIC Commonwealth of Massachusetts My Commission Expires Dec. 8, 2011
Notary Public U

ASSIGNMENT

WHEREAS, I, Booyong S. Lim, being a citizen of Korea, residing at 254 E. Emerson Road, Lexington, Massachusetts 02420 am a co-inventor of certain new and useful inventions and discoveries, for which an application for Letters Patent entitled "Atomic Layer Deposition Using Metal Amidinates," was filed with the United States Patent and Trademark Office on May 12, 2005, and assigned United States Patent Application Number 10/534,687; and

WHEREAS, President and Fellows of Harvard College, a Massachusetts non-profit organization, whose business address is 17 Quincy Street, Cambridge, Massachusetts 02138, and which, together with its successors and assigns is hereinafter called "ASSIGNEE," is desirous of acquiring the title, rights, benefits, and privileges hereinafter recited;

NOW, THEREFORE, for and in consideration of good and valuable consideration furnished by ASSIGNEE to me, receipt and sufficiency of which I hereby acknowledge, I hereby, without reservations:

- 1. Assign, transfer, and convey to ASSIGNEE my entire right, title, and interest in and to said inventions and discoveries, said application for Letters Patent, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, continuation-in-part, continued prosecution applications, and convention applications based in whole, or in part, upon said inventions or discoveries, or upon said applications, and any and all Letters Patents, reissues, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon, or arise from, said inventions, said discoveries, said applications, and said Letters Patent;
- 2. Authorize ASSIGNEE to file patent applications in any or all countries on any or all of said inventions and discoveries in my name or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable, under International Conventions or otherwise;
- 3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments throughout the world to issue or transfer all said Letters Patents to ASSIGNEE, as assignee of the entire right, title, and interest therein or otherwise as ASSIGNEE may direct;
- 4. Warrant that I have not knowingly conveyed to others any right in said inventions, discoveries, applications, or patents, or any license to use the same, or to make, use, or sell

anything embodying or utilizing any of said inventions or discoveries; and that I have good right to assign the same to ASSIGNEE without encumbrance;

ASSIGNEE's request and at ASSIGNEE's expense, but without additional consideration to me or them, all acts reasonably serving to assure that said inventions and discoveries, said patent applications, and said Letters Patents shall be held and enjoyed by ASSIGNEE as fully and entirely as the same could have been held and enjoyed by me, my heirs, legal representatives, and assigns if this Assignment had not been made; and particularly to execute and deliver to ASSIGNEE all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by ASSIGNEE; and to communicate to ASSIGNEE all facts known to me relating to said inventions and discoveries or the history thereof, and to testify as to the same in any court or proceeding; and to furnish ASSIGNEE any and all documents, photographs, models, samples, and other physical exhibits in my control or in the control of my heirs, legal representatives, or assigns which may be useful for establishing the facts of my conceptions, disclosures, and reduction to practice of said inventions and discoveries.

IN TESTIMONY 2006.	WHEREOF, I have hereunto set my hand and seal this 12 day of January Booyong S. Lim
	COMMONWEALTH OF MASSACHUSETTS
MIDDLESEX	
to me through sat	y of <u>January</u> , 2006, before me, the undersigned resonally appeared <u>Boryong S. Lim</u> , proved isfactory evidence of identification to be the person whose name is signed on the shed document in my presence.
Tame	
Notary Public	PAMELA SAFINO
	Notary Public Commonwealth of Massachusetts My Commission Expires